

L 58973-65

ACCESSION NR: AP5018747

ASSOCIATION: Institut evolyutsionnoy fiziologii i biokhimii im. I. M. Sechenova
Akademii nauk SSSR (Institute of Evolutionary Physiology and Biochemistry, Academy of Sciences, SSSR); Institut elementoorganicheskikh soyedinenii Akademii nauk SSSR (Institute of Organoelemental Compounds, Academy of Sciences, SSSR)

SUBMITTED: 01Feb65

ENCL: 00

SUB COMB: C3, L5

NO REF SOV: 005

OTHER: 003

ATD PRESS: 4048

Card 3/3

L 64323-65 EWT(1)/EWA(j)/EWT(m)/EWA(b)-2 DM/RO/RM

ACCESSION NR: AP5022929

UR/OD 12/65/000/008/13 Td/1375

661.718.1

26

B

AUTHOR: Rozengart, Ye. V.; Godyna, Ye. I.; Godovikov, N. N.

TITLE: Anticholinesterase properties of some O-ethyl S-alkyl methylthiophosphonates.

2. Kinetics of inhibition of cholinesterase and acetylcholinesterase by O-ethyl
S-n-alkyl methylthiophosphonates

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 8, 1961, 1370-1375

TOPIC TAGS: nerve gas, chemical warfare agent, cholinesterase inhibitor, anti-cholinesterase activity, thiophosphate ester

ABSTRACT: The kinetics of inhibition of equine blood-serum cholinesterase and bovine erythrocyte acetylcholinesterase by a series of O-ethyl S-n-alkyl methylthiophosphonates were studied. The n-alkyl ranged from C₂ to C₁₀. The rate constants of alkaline hydrolysis of the above esters were determined. It was found that the inhibiting action of the esters increases with increasing alkyl size, up to C₆ for cholinesterase and up to C₈ for acetylcholinesterase. A further increase in alkyl size does not bring about any increase in inhibition. Alkaline hydrolysis rate constants for all compounds were found to be nearly identical. The authors suggest that variations in

Card 1/2

L 64323-65

ACCESSION NR: AP5022929

anticholinesterase activity among the above esters are determined mainly by steric factors, rather than by electron-density aspects, i.e., phosphorylating ability. The inhibition mechanism is discussed. The kinetic data and the physical constants of the esters are given in tabular form. Orig. art. has: 2 figures and 4 tables. [VS]

ASSOCIATION: Institut evolyutsionnoy fiziologii im. I. M. Sechenova Akademii nauk SSSR (Institute of Evolutionary Physiology, Academy of Sciences, SSSR); Institut elementoorganicheskikh soyedineneniy Akademii nauk SSSR (Institute of Heteroorganic Compounds, Academy of Sciences, SSSR)

SUBMITTED: 22Nov63

ENCL: 00

SER. CODE: CB, OC

NO REF SOV: 006

OTHER: 003

ATD PRESS 4083

Card 2/2

L 65027-65 EWT(1)/EWA(j)/EWT(m)/EWA(b)-2 RO/RM

ACCESSION NR: AP5022534

UR/0 166/65/001/009/1658/1662

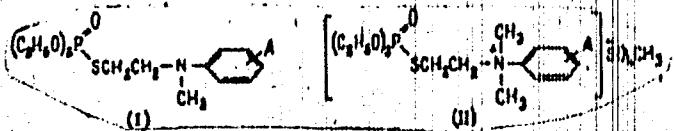
546.185.5 7.55

AUTHOR: Teplov, N. Ye.; Godovikov, N. N.; Kabachnik, M. I.

TITLE: Synthesis of O,O-diethyl S- β -(aryl methylamino)ethyl thiophosphates and their methylsulfates

SOURCE: Zhurnal organicheskoy khimii, v. 1, no. 9, 1965, 1658-1662

TOPIC TAGS: nerve gas, phosphate ester, chemical warfare, cholinesterase inhibitor, thiophosphate ester, enzyme inhibitor

ABSTRACT: The compounds synthesized in this work are of interest to the general study of organophosphorus cholinesterase inhibitors.⁵⁵ (Their physiological activity is described in AN SSSR. Doklady, v. 163, no. 2, 1965, 365-368). Compounds of the type

Card 1/3

L 65027-65

ACCESSION NR: AP502253h

where A = CH₃, Cl, H, were prepared starting with the corresponding N,N-dimethylanilines. An equimolar mixture of ethylene chlorohydrin with the appropriate N,N-dimethylaniline was allowed to react at 190–200°C. Reaction time varied from 5 to 14 hours, depending on the nature of the substituent in the aniline molecule. The N-methyl-N-β-hydroxyethylanilines obtained in this manner were converted to the corresponding N-methyl-N-β-chloroethylanilines by treatment with phosphorus oxychloride. 0,0-diethyl S-β-(aryl methylamino)-ethyl thiophosphates were obtained by boiling equimolar mixtures of N-methyl-N-β-chloroethylaniline and 0,0-diethyl phosphorus thio-phosphate dissolved in absolute ethanol for 8–14 hours. The product was purified by distillation under vacuum. The methylsulfates of the 0,0-diethyl S-β-(aryl methylamino)-ethyl thiophosphates were prepared by treatment of the free amine base with an equimolar amount of methyl sulfate in boiling absolute benzene for 2–4 hours. After reprecipitation with absolute ether from ethanol, and vacuum drying, the methylsulfates were isolated in the form of transparent viscous oils. The physical constants and yields are given in tabular form. The anticholinesterase properties of the compounds described above are being investigated at the biochemistry laboratory of the Institute of Evolutionary Physiology im. I. M. Sechenov AN SSSR. Orig. art. has: 4 tables.

[vs]

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR (Institute of Heteroorganic Compounds, Academy of Sciences, SSSR) 53
Cord 2/3

L 65027-65	ACCESSION NR: AP5022534	ENCL: 00	SUB CODE: CB, OC	O			
SUBMITTED: 188ep64	NO REF SOV: J03	OTHER: 009	ATTD PRESS: 6082				
Card 3134166							

Chem. Inst., U.S.S.R., Tver', N.Ye.; Kirovgrad, N.Y.

Synthesis of O-ethyl- δ -(β -aryloxyethyl)benzyl carbamate.
Inv. AM SF R. Ser. Khim. no.1:164-166 1965.

(14.1 pg.)

1. Institut elementoorganicheskikh soedinenii V.I. R. Submited May 17, 1965.

ANDREYEV, Yu.K.; GODOVIKOV, V.N.

Occurrences of alkali hornblades in lower Permian marls of the
Dzhezkazgan deposit. Trudy IGEM no.31:112-118 '59.
(MIRA 12:7)
(Dzhezkazgan District--Hornblende)

VYSHEDSKIY, M., (Tashkent); GODOVIKOV, Ye. (Tashkent)

Refueling crews of drivers. Grazhd.av. 13 no.8; 6 Ag '56.
(MLRA 9:10)

(Airplanes--Refueling)

GODOVIKOVA, D.B.

Role of a preliminary visual acquaintance with the conditions of
a problem in the formation of a motor skill among preschool chil-
dren. Vop.psichol. 5 no.2:144-156 Mr-Ap '59. (MIRA 12:6)

1. Institut psichologii Akademii pedagogicheskikh nauk RSFSR,
Moskva.

(Learning, Psychology of)
(Orientation (Psychology))

AUTHORS: Yur'yev, Yu.K., Rozantsev, E.G., and
Godovikova, S.N. SOV/55-58-1-24/33

TITLE: Catalytic Changes of Heterocyclic Combinations. LIV. Change of
2,3,5 - Trialkyl - Fur nadynes Into 2,3,5 - Trialkylthiophanes
(Kataliticheskiye prevrashcheniya geterotsiklicheskikh soyedineniy.
LIV. Prev rashcheniye 2,3,5 - trialkilfuranidinov v 2,3,5 - trialkil-
tiofany)

PERIODICAL: Vestnik Moskovskogo universiteta, Seriya fiziko-matematicheskikh i
yestestvennykh nauk, 1958, Nr 1, pp 183-186 (USSR)

ABSTRACT: The method of the analytic change of oxygen-containing heterocyclic
combinations in cycles with other heteroatoms was used success-
fully for the synthesis of 2,3,5 - trimethyl, 2,5 - dimethyl - 3 -
ethyl - and 2,5 - dimethyl - 3 - propylthiophane out of
corresponding trialkylfurnidynes. The obtained 2,3,5 - trialkyl-
thiophanes are colorless fluids not solvable in water, boiling at
the normal pressure, and having a characteristic odor.
There are 12 references, 8 of which are Soviet, 3 American, and
1 French.

ASSOCIATION: Kafedra organicheskoy khimii (Chair of Organic Chemistry)
Card 1/2

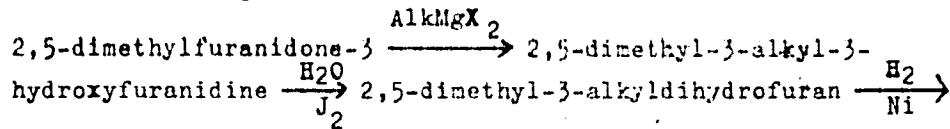
AUTHORS: Yur'yev, Yu. K., Rozantsev, E. G., SCV/79-28-8-36/66
Godovikova, S. N.

TITLE: Synthesis of the 2,5-Dimethyl-3-Alkylfuranidines (Sintez
2,5-dimetil-3-alkilfuranidinov)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol. 28, Nr 8,
pp. 2168 - 2171 (USSR)

ABSTRACT: The present paper describes the synthesis of the trialkyl-
furanidines, which have the alkylradicals in the 2,3 and 5-
positions. Reports in literature on the 2,5-dimethyl-3-ethyl-
furanidine only are available (Ref 2). The synthesis is
carried out by distillation of the 4-ethylhexene-1-ol-5
with phosphoric acid. The authors synthesized the 2,2,5-tri-
alkylfuranidines from 2,5-dimethyl-furanidone-3 according
to the following scheme:

Card 1/3



Synthesis of the 2,5-Dimethyl-3-Alkylfuranidines

SOV/79-28-8-36/66

2,5-dimethyl-3-alkylfuranidine. According to this method 2,3,5-trimethyl-3-hydrofuranidine; 2,5-dimethyl-3-ethyl-3-hydroxyfuranidine and the 2,5-dimethyl-3-propyl-3-hydroxyfuranidine which has not been described, heretofore, were synthesized. The dehydration of the 2,5-dimethyl-3-alkyl-3-hydroxyfuranidine produces a mixture of the dihydrofuran isomers with an admixture of diene hydrocarbons. For the dehydration of the tertiary alcohols of the furanidine series iodine and p-toluene sulfonic acid are the best means. The catalytic hydration of the 2,5-dimethyl-3-alkyldihydrofurans yields 2,5-dimethyl-3-alkylfuranidine. The described synthesis of the 2,3,5-trialkylfuranidines represents a general method of synthesis of the furanidine homologs of this structure. There are 1 table and 7 references, 4 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: July 1, 1957
Card 2/3

Synthesis of the 2,5-Dimethyl-3-Alkylfuranines
~~Synthesis of the 2,5-Dimethyl-3-Alkylfuranines~~

327//79-28-6-36/66

Codex 353

AUTHORS: Yur'yev, Yu. K., Vysokosov, A. N., Godovikova, S. M. SOV/79-28-10-23/6c

TITLE: Tetra-Acyloxy Silanes in Organic Synthesis (Tetraatsilosilany v organicheskem sinteze) XIX. Synthesis of the 3- and 4-Nitro-Cinnamic Acids and Their Homologs of the α -Alkyl- β -(Nitrophenyl)-Acrylic Acids(XIX. Sintez 3-i-4-nitrokorichnoy kislot i ikh gomologov α -alkil- β -(nitrofenil)-akrilovykh kislot)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol 28, Nr 10, pp 2770 - 2772 (USSR)

ABSTRACT: In the present paper the condensation of the silicic anhydrides of the saturated monovalent organic acids with m- and p-nitro-benzaldehyde was carried out. The following nitro-cinnamic were obtained in high yields: 83,5% 3-nitro-cinnamic-, 89,5% 4-nitro-cinnamic-, 88% 4-nitro- α -methyl-cinnamic-, 87% 4-nitro- α -ethyl-cinnamic-, 47% 4-nitro- α -propyl-cinnamic-, 59% 4-nitro- α -isopropyl-cinnamic- and 4-nitro- α -butyl-cinnamic acid. Sodium acetate was used as condensing agent in the

Card 1/3

Tetra-Acyloxy Silanes in Organic Synthesis. XIX. S07/9-28-10-26/60
Synthesis of the 3- and 4-Nitro-Cinnamic Acids and Their Homologs of the
 α -Alkyl- β -(Nitrophenyl)-Acrylic Acids

reaction of the m- and p-nitro-benzaldehyde with silicon acetic anhydride; in the condensations with silicic anhydride of the other acids potash (Scheme) was used. The same behaviour of these anhydrides and the anhydrides of organic acids in the Perkins reaction is demonstrated by the fact that their condensation with nitro-benzaldehyde takes place more completely and leads to higher yields of nitro-cinnamic acids than of unsubstituted cinnamic acids. The stabilizing effect of the nitro group of the carbonyl component is shown without any doubt in the intermediate stage of the reaction where the ester of the ortho-silicic acid and of the α -alkyl- β -(nitrophenyl)- β -oxyhydro acrylic acid (II) formed from the affiliation product (I) loses the silicic acid more easily under the formation of the compound (III) than it is subjected to the decarboxylation and the separation of silicic acid under the formation of the nitro-styrene homolog (IV). The condensation mentioned above offers high yields of

Card 2/3

Tetra-Acyloxy Silanes in Organic Synthesis. XIX. SOV/79-28-1c-28/6c
Synthesis of the 3- and 4-Nitro-Cinnamic Acids and Their Homologs of the
 α -Aky1- β -(Nitrophenyl)-Acrylic Acids

the corresponding nitro-cinnamic acids also in the case where the silicic anhydride is formed from an acid with a ramified radical. There are 2 tables and 9 references, 2 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: September 26, 1957

Card 3/3

GOL'FARB, Ya.L.; GODOVIKOVA, S.N.

Structure of the products from the amidation of nicotine. Izv.
AN SSSR. Otd. khim. nauk no.2:360-362 F '61. (MIRA 14:2)

1. Institut organicheskoy khimii im.N.D.Zelinskogo AN SSSR.
(Nicotine) (Pyridine)

GOREV'KOVA, S.N., GOL'DFARB, Ya.L.

Course of bromination reaction of 2-aryl(alkyl) pyrimidazoles.
Inv. AN SSSR. Ser. khim. no.8:1434-1441 '65. (MIFA 18;9)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.

GOL'DFARD, Ya.L.; GODOVIKOVA, S.N.

Synthesis of 3-alkylmercapto-2-aryl(alkyl)pyrimidinocles. Izv.
AN SSSR. Ser. khim. no.9:1671-1673 '65. (VIRA 18:9)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.

5.3400

5(3)

68052

SOV/55-59-3-21/32

AUTHORS: Levina, R. Ya., Godovikova, T. I., Vinogradova, V. N.

TITLE: On the Synthesis of Ethers and Esters of Cyclopentene-1-ol-3 and Its Homologs

PERIODICAL: Vestnik Moskovskogo universiteta. Seriya matematiki, mekhaniki, astronomii, fiziki, khimii, 1959, Nr 3, pp 171 - 175 (USSR)

ABSTRACT: The present paper is a continuation of the investigation of the use of mono- and dichlorocyclopentenes in organic synthesis. From 3-cyclopentene-1 and potassium acetate the authors obtained the ester 3-acet-oxy-cyclopentene-1 with a 60% yield. As the production of 3-ethoxy-cyclopentene was not possible with sodium ethylate, the latter was caused to react with 1,2-dibromocyclopentane, and the hitherto not described 3-ethoxy-cyclopentene-1 was obtained with a 35% yield. For the purpose of obtaining homologs of this compound, 1-methyl- and 1-ethyl cyclopentene-2 were produced by the action of organomagnesium compounds upon 1-chlorocyclopentene-2, after which it was transformed into dibromide and caused to react with sodium ethylate. As a result of allyl regrouping, a

Card 1/2

On the Synthesis of Ethers and Esters of Cyclopentene-1-ol-3 and Its
Homologs

68052

SOV/55-59-3-21/32

mixture of alkoxy-alkyl cyclopentenes was obtained, the composition of which could be explained by means of the Raman spectra recorded by Ye. G. Treshchova: In the reaction of the ethyl derivative 43% of 3-ethoxy-1-ethylcyclopentene-1 and 57% of 1-ethoxy-1-ethyl cyclopentene-2 had been formed. There are 5 references, 4 of which are Soviet.

ASSOCIATION: Kafedra organicheskoy khimii (Chair of Organic Chemistry)
SUBMITTED: January 2, 1959

Card 2/2

5(2, 3)
AUTHORS:

Novikov, S. S., Godovikova, T. I.,
Tartakovskiy, V. A.

SOV/20-124-4-29/67

TITLE:

Synthesis of Organomercuric Nitrogen Compounds (Sintez
rtut'organicheskikh nitroscyedineniy)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 4, pp 834-837
(USSR)

ABSTRACT:

As is known, many mercury salts of organic and inorganic acids are used for mercurization reactions, for the addition to double and triple bonds, etc. The authors found that the trinitromethane mercury salt readily mercurizes those compounds of the aliphatic series which contain a mobile hydrogen atom, as well as those of the aromatic and heterocyclic series. In this process substances with a common formula $R - HgC(NO_2)_3$ are produced.

The authors studied this reaction with malonic, acetoacetic and nitroacetic esters, with acetylacetone, acetone, cyclopentane, benzene, toluene, aniline, dimethyl aniline, furan and thiophene. Table 1 contains the conditions of reaction, yields and analyses of the final products. Trinitromethyl mercury aryls

Card 1/4

Synthesis of Organomercuric Nitrogen Compounds

SOV/20-124-4-29/67

form, on the action of bromine, corresponding mercury bromides and bromo-trinitro methane which are transformed into mercury chlorides by concentrated HCl. It may be assumed that the mercurization products and the trinitro-methane mercury salts can exist as two interconvertible tautomeric forms, depending on the nature of the solvent. In this connection the authors point to the fact that their ultraviolet spectra are very different in polar and apolar solvents (Ref 2). In crystalline state, these substances are pure organo-metallic compounds $R - HgC(NO_2)_3$. The reaction of trinitro-methane mercury salt with nitro-benzene, m-dinitro-benzene, o-nitro-toluene and o-nitro-anisole takes place in a very particular manner. The substances synthesized therein are complex addition products of a mercury salt molecule to the molecule of the respective aromatic compound. By the action of alkalis the complex is destroyed under formation of the nitro-aromatic initial compound, mercury oxide and a corresponding trinitro-methane salt. The trinitro-methane mercury salt does not react with any compound containing the substituents in meta-position with respect to the nitro group. A structure of the complex

Card 2/4

Synthesis of Organomercuric Nitrogen Compounds

307/2C-124-4-29/67

is suggested accordingly (see Scheme). By investigation of the interaction between $Hg[C(NO_2)_3]_2$ and ethylene in an aqueous or alcoholic solution the authors detected quite unexpectedly that in this case not an alcohol is formed but trinitro-methyl-3,3,3-trinitro-propyl mercury. The same compound is obtained by the action of trinitro-methyl mercury salt in ethylene in nitro-benzenes and nitro-methane. Therefore it may be taken for granted that the latter product is synthesized by direct addition of the elements of trinitro-methane mercury salt to ethylene (Scheme II). This is a new reaction. It is interesting that not only the salt mentioned is capable of addition reactions to the double bond but also the compounds of the type $R - HgC(NO_2)_3$. The addition of trinitro-methane mercury salt to the double bond was studied with propylene, styrene, cyclohexene, allyl alcohol as well as with the methyl ester of acrylic acid. The reaction takes place in any case according to scheme II. The constants and yields of some substances produced are given in table 3. Whereas symmetrical mercuri-organic polynitro compounds completely resist the action of acids, halogens and halogen salts, the

Card 3/4

Synthesis of Mercuri-organic Nitro Compounds

SOV/20-124-4-29/67

asymmetrical ones enter into reaction with them according to the scheme mentioned. The trinitro-methane mercury salt cannot be added to olefins with isostructure (isobutylene, 3-ethyl pentene-3) which contain at least one quaternary hydrocarbon atom at the double bond. There are 3 tables and 5 references, 3 of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskogo of the Academy of Sciences, USSR)

PRESENTED: July 14, 1958, by A. V. Topchiyev, Academician

SUBMITTED: July 11, 1958

Card 4/4

NOVIKOV, S.S.; GODOVIKOVA, T.I.; TARTAKOVSKIY, V.A.

Synthesis of organomercury nitro compounds. Report No.3: Reactions of the mercuric salt of trinitromethane with nitro derivatives of aromatic compounds. Izv.AN SSSR Otd.khim.nauk no.5: 863-865 My '60. (MIRA 13:6)

1. Institut organicheskoy khimii imeni N.D. Zelinskogo Akademii nauk SSSR.

(Methane) (Nitro compounds) (Mercury compounds)

TARTAKOVSKIY, V.A.; NOVIKOV, S.S.; GODOVIKOVA, T.I.

Synthesis of organomercury nitro compounds. Report 4: Addition of trinitromethane mercury salt to unsaturated hydrocarbons. Izv. AN SSSR. Otd. khim. nauk no.6:1042-1049 Je '61. (MIRA 14:6)

1. Institut organicheeskoy khimii im. N.D.Zelinskogo AN SSSR.
(Nitroform) (Olefins)

NOVIKOV, S.S.; TARTAKOVSKIY, V.A.; GODOVIKOVA, T.I.; GRIBOV, B.G.

Synthesis of organomercuric nitro compounds. Report No.5:
Addition of mercuric salt of trinitromethane to unsaturated
alcohols. Izv. AN SSSR Otd.khim.nauk no.2:272-276 F '62.
(NIRA 15:2)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Mercury organic compounds)
(Nitroform)
(Olefins)

NOVIKOV, S.S.; TARTAKOVSKIY, V.A.; GOLOVIKOVA, T.I.; GRIBOV, B.G.

Synthesis of organomercuric nitro compounds. Report No.6:
Mechanism of the direct addition mercury salt of
trinitromethane to the double bond. Izv. AN SSSR Otd.khim.
nauk no.2:276-281 F '62. (MIRA 15:2)

1. Institut organicheskoy khimii im. N.E.Zelinskogo AN SSSR.
(Mercury salts)
(Unsaturated compounds)
(Nitroform)

GODOVKIN, S.

Repairing sections of the MG-2 boiler. Zhil.-kom. khoz. 12 no.2:34 F
'62. (MIRA 25:7)

1. Glavnnyy inzh. remontno-stroitel'noy kontory Stroitel'nogo
upravleniya Kuybyshevskoy gidroelektrostantsii, g. Stavropol',
Kuybyshevskaya obl.

(Boilers—Welding)

GODOVKIN, V.

More housing for workers. Sov.profsoiuzy 6 no.16:52-55
M '58. (MIRA 12:2)

1. Predsedatel' Kuybyshevskogo oblastnogo soveta profsoyuzov.
(Kuybyshev Province--Labor and laboring classes--Dwellings)

LAZAREV, Ye.; SAFONOVА, L.; GODOVKINA, E.; VORZHEVA, L.V., prof.,
nauchnyy rukovoditel'

Effect of microelements on the growth and development of young
birds. Uch.zap.Kuib.gos.ped.inst. no.37:27-32 '62.
(MIRA 16:1)

(Trace elements)

(Poultry--Feeding and feeds)

GODOVKINA, N. V.

"Some Results of Studying Tilts of the Earth's Surface in Stalinsbad and Obi-Garmin 1946 and 1947," pp 61-67, Symposium of Articles and Lectures (which is No. 5 (132) in the series entitled "Works of the Geophysical Inst.," AS USSR Press, Moscow and Leningrad, 1949.

U-1442, 28 Aug 51

GOVERNMENT OF THE UNITED STATES OF AMERICA

Variations of magnetic field in different groups of animals
groups with felids feline cat. 1977. 1978. 1979. 1980. 1981.
Total.

BLONIMSKIY, G.L.; GODOVSKIY, Yu.K.

Temperature dependence of the heat capacity of isotactic poly-
propylene. Vysokom. soed. 7 no.4:621-625 Ap '65.

(MIFI 18:6)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

GODOVSKIY, Yu.K., BARSKIY, Yu.P.

Using the thermal analysis method for measuring the specific heat and thermal effects of polymers. Plast. massy no.7:57-59 '65. (MIRA 18:7)

GODOWICZ, Barbara

A comparison of degenerative changes in the process of
spermatogenesis in male mice differing in genotype.
Fol. biol. (Krakow) 13 no.3:297-309 '65.

1. Department of Animal Genetics, Jagiellonian University,
Krakow.

ZAWADZKI, Jerzy, prof. dr inz.; CIESLAR, Boguslaw, dr inz.;
GABRYSZEWSKI, Zdzislaw, dr inz.; OKOLOW, Bronislaw, dr inz.;
GODOWICZ, Tadeusz, dr inz.

Certain mechanical problems in the design of high-power turbo-generators. Przegl elektrotechn 40 no.5:222 My '64.

1. Department of Technical Mechanics, Technical University, Wroclaw (for Zawadzki, Cieslar, Gabryszewski, Okolow).
2. Dolmel Works, Wroclaw (for Godowicz).

GODSTADT, N. F.

4019. Pharmacology of *Bergenia crassifolia*. N. F. Godstadt
Nos. lek. Rad. Sibiri, 1933, 4, 118-151; *Reflerat. Zb. Zool.* 1933, 10, 10.
Abstr. No. 51973.—Experiments were carried out on human subjects with hyperemia produced by mustard plasters. The hyperemia was quickly removed by application of *Bergenia crassifolia* extract (I). With a 1% application of I redness disappeared in 80 min. with 2% in 40 min., and with 5% in 28.4 min. The contractile force in dilutions of 2 : 1000 amounted to 9.2-10%. Dilutions of 20 : 100 produced contraction of 75.3-80%. On isolated pieces of rabbit gut I in dilutions of 1 : 10,000 caused a lowering in the amplitude of contractions and slowing of the rhythm. The anti-septic action of I on pathogenic organisms of the digestive system is most pronounced with dysentery, bacillary and typhoid. *R. Sbornik 1933*.
[Handwritten note: 100]

GODUKHIN, V.M., kand. tekhn. nauk

Effect of the speed of a planter on the dispersion zone of tubers.
Mekh. i elek. sots. sel'khoz. 21 no.5:28-30 '63. (MIRA 17:1)

1. Gor'kovskiy sel'skokhozyaystvennyy institut.

GODUKHIN, V.M., kand.tekhn.nauk

Investigating the performance of the SN-4B planter at increased speeds. Trakt. i sel'khozmash. 33 no.8:24-26 Ag '63. (MIRA 16:11)

1. Gor'kovskiy sel'skokhozyaystvennyy institut.

COUNTRY : Poland H
CATEGORY : Chemical Technology. Chemical Products and
Their Applications. Elements. Oxides. Mineral*
ABS. JOUR. : RZKhim., No. 23 1959, No. 82794

AUTHOR : Akerman, K.; Zmudzinski, B.; Godula, R.
INST. : -
TITLE : Derivation of Aluminum Oxide Through Leaching
of Loose Aluminum Containing Slags with Soda
Solutions.
ORIG. PUB. : Arch. hutn., 1958, 3, No 4, 255-285

ABSTRACT : Slags derived from agglomerate calcination in
a rotary kiln or(in an hearth type roasters)
of clayey raw materials with anhydrite and
limestone containing in the first and second
instances respectively (in wt%): Al₂O₃ - 15-17
and 23 - 26; CaO - 55-57 and 50-52; SiO₂ -18-20
and 13 - 15; 70 - .90% of the derived slag pass
through the 0.06 mm mesh sieve. Investigations
conducted on a semi-commercial scale in the
batch type operation revealed that after two

*Acids, Bases, Salts.
CARD: 1/2

GODULA, Tadeusz

Influence of the interchangeability of sets on the standstill
in locomotive repair. Przegl kolej mechan 10 [l.e.15] no.12:
361-364 D '63.

1. Central Locomotive Designing Office, Wroclaw.

U.S.S.R., Rybacheskaya River, hydrochemical characteristics

hydrochemical characteristics of underground waters of the Rybacheskaya
River Basin. Przeglad geol. 20 no. 4 (1975), p. 194.

Georgian 1

USSR/Cultivated Plants. Grains.

M

Abs Jour: Ref Zhur-Biol., No 5, 1958, 20277.

Author : I.S. Gedulyan

Inst : All-Union Scientific Research Institute for Corn.

Title : Crops Preceding Corn in Field Crop Rotations. (Predshest-
venniki kukuruzy v polevykh sevooborotakh).

Orig Pub: Byul. Vses. n.-i. in-ta kukuruzy, 1956, No 2, 3-6.

Abstract: Preliminary data is given on the study of various crops preceding corn at the Erastovskiy and Rozovskiy experimental fields and at the Krasnodar testing station from 1948 to 1955. The highest yields were obtained after winter crops grown on fallow soil, the lowest yields after summer grain. The yield difference after various preceding crops in years having unfavorable weather

Card : 1/2

Card : 2/2

GODULYAN, I.S., kand. sel'skokhozyaystvennyki nauk; THULEVICH, N.L.

Seedbed preparation for winter wheat after preceding stubble crops.
Zemelodelie 6 no.6:37-40 Je '58. (MIRA 11:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut kukuruny.
(Tillage) (Wheat)

GODULYAN, L.S.

Including corn into crop rotations is of great importance in
increasing the productivity of field crop cultivation. Zemledelie
7 no.7:50-54 J1 '59. (MIRA 12:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut kukuruzы.
(Corn(Maize)) (Rotation of crops)

GODULYAN, Ivan Stepanovich [Hodulian, I.S.], kand. sel'khoz. nauk;
SHARPILO, Pavel Stepanovich [Sharpylo, P.S.]; ZADONTSEV, A.I.,
zas. deyatel' nauki URSS, akademik; LIVENSKAYA, O.I. [Livens'ka,
O.I.], red.; GIUSHKO, G.I. [Glushko, H.I.], tekhn. red.

[Best preceding crops for corn] Kukurudzi - krashchykt. popered-
nykiv. Dnipropetrovs'k, Dnipropetrovs'ke knyzhkovye vyd-vo,
1961. 22 p. (MIRA 15:7)

1. Direktor Vsesoyuznogo nauchno-issledovatel'skogo institu-
ta kukuruzy i Vsesoyuznaya akademiya sel'skokhozyaystvennykh
nauk im. V.I.Lenina (for Zadontsev).

(Ukraine--Corn (Maize)) (Rotation of crops)

GODULYANOV, N.

Improve the methods for determining the quantity and quality of
gluten in wheat. Muk.-elev. prom 28 no.9:7-8 S '62. (MIRA 15:10)

1. Odesskoye upravleniye Gosudarstvennoy khlebnoy inspeksii.
(Wheat—Analysis and chemistry) (Gluten)

GODUMENKO, Lyubov' Nikolayevna, doyarka; USTYUGOV, P.G., red.; HEYSHENOV, A.,
tekhn. red.

[Let us use loose housing of cows] Korov soderzhim bez pri-
viazi. Frunze, Kirgizskoe gos. izd-vo, 1960. (MIRA 15:3)

1. Sovkhoz "Dzhangi-Pakhta" (for Godumenko).
(Dairy barns)

• TUM, A., inzner.

Substitution of throttle diaphragms for steam trans. Nos. -zhir.
prot. 17 no. 8:25-26 Apr '52. (MIRA 10:9)

I. Giorozhir.

(Steam trans)

GODUN, A.S., inzh.

Preventing heat losses in gas tanks. Masl.-zhir.prom. 24
no.5:34 '58. (MIRA 12:1)

1. Gosudarstvennyy institut po proektirovaniyu maslobochnoy,
zhirovoy, mylovarennoy, parfyumernoy i margarinovoy promyshlen-
nosti.

(Gasholders)

(Mineral wool)

GODUN, A.S., inzh.

VTIK-1 dryer. Masl.-zhir. prom. 24 no.10:30-33 '58. (MIRA 11.10)

1. Giprozhir.

(Drying apparatus)

GODUN, A.S., inzh.

Development of power equipment in the oil and fat industry.
Masl.-zhir.prom. 25 no.1:13-15 '59. (MIRA 12:1)

1. Gosudarstvennyy institut po proyektirovaniyu masloboynoy,
zhirovoy mylovarennyoy, parfyumernoy i margarinovoy promyshlennosti.
(Oil industries--Equipment and supplies) (Boilers)

GODUN, A.S., inzh.

Water softening by the magnetic method. Masl.-shir.prom.
25 no.9:41-43 '59. (MIRA 12:12)

1. Gosudarstvennyy institut po proyektirovaniyu masloboynoy,
shirovoy, mylovarennoy, parfyumernoy i margarinovoy promyshlen-
nosti.

(Water--Softening) (Magnetic instruments)

GODUN, A.S., inzh.

Selecting an efficient system for collecting condensates at oil
mills. Masl.-zhir.prom. 26 no.1:29-31 Ja '60.

(MIRA 13:4)
(Oil industries--Equipment and supplies)

GODUN, A.S., inzh.

Using the induction heating method to warm up hydrogenated oils. Masl.-zhir. prom. 29 no. 5:38-39 My '63.

(MIRA 16:7)

1. Gosudarstvennyy institut po proyektirovaniyu masloboynoy, shirovoy, mylovarennoy, parfyumernoy i margarinovoy promyslennosti.

(Oils and fats) (Induction heating)

GODUN, I.I., inzh.; KILIMONOV, A.A., inzh.

Devices for automatic control of gaps between brake shoes
and brake drums of motortrucks. Mashinostroenie no. 2190
Nr-Ap '65. (MIRA 18:6)

KIT, S.M.; GODUN, V.M. [Hodun, V.M.]

Study of the antimicrobic properties of some plants of the
Carpathian Mountain region. Farmatsiev. zhur. 15 no.6: 52-55
'60. (MIRA 14:11)

1. Kafedra farmakologii (zaveduyushchiy kafedroy prof. F.V.Kovshar)
i kafedra mikrobiologii (zaveduyushchiy kafedroy prof. T.I.Ivanova)
Stanislawskogo meditsinskogo instituta.
(CARPATHIAN MOUNTAIN REGION--BOTANY, MEDICAL)

GODUN, V.M.

Therapeutic effectiveness of albomycin and colimycin administered alone and in combination on a model of Shigella keratoconjunctivitis. Antibiotiki 7 no.10:920-921 O'62
(MIRA 16:12)

1. Kafedra mikrobiologii (zav. - prof. T.I. Ivanova) Stanslavskogo meditsinskogo instituta.

MATSIIVSKY, V.A., L. S. KOVICH, D. E., GOLOVIN, V. M.

Some epidemiological and clinical characteristics of epidemic hepatitis of the recent years; author's abstract. Zhur. mikrobiol., epid. i immun. 40 no.10:149-0 '63.

(NIMA 17:6)

1. Iz Ivano-Frankovskogo meditsinskogo instituta.

VITVITSKIY, V.M.; GODUN, V.M.; KIMEL'BLAT, M.A.

Change in the sensitivity of dysentery agents to some antibiotics in
Ivano-Frankovsk between 1958 and 1963. Antibiotiki 9 no.12:1108-1110
D '64. (MIRA 18:7)

1. Kafedra mikrobiologii (zav. - prof. T.I.Ivanova) Ivano-Frankovskogo
meditsinskogo instituta i Ivano-Frankovskaya infektsionnaya klinicheskaya
bol'nitsa (glavnnyy vrach Ye.I.Gulyayevskaya).

TIMERMANIS, Yevgeniy Avgustovich; GGDUNOV, A.A., red.

[Improving production administration in the Leningrad Economic Region] Sovershenstvovanie upravleniya proizvodstvom v Leningradskom sovnarkhoze. Leningrad, 1964.
25 p. (MIRA 18:3)

GODUNOV, A.K.

Yaroslavl rubber industry workers are carrying out the decisions of the March Plenum of the Central Committee of the CPSU. Kauch.i rez. 21 no.9:61-62 S '62. (MIRA 15:11)
(Yaroslavl—Rubber goods)

SOV/97-59-1-11/18

AUTHORS: Mordovina, A.N., Candidate of Technical Sciences;
Godunov, B.I., Engineer, and Sitnin, O.V., Engineer.

TITLE: Precast Reinforced Concrete Used for Floors in the Under-Water Parts of Hydroelectric Power Stations (Sbornyy zhelezobeton v perekrytiyakh podvodnoy chasti giro-elektrostantsiy)

PERIODICAL: Beton i Zhelezobeton, 1959, Nr 1, pp 36-39 (USSR)

ABSTRACT: Prestressed reinforced concrete load-carrying floor beams were used for the construction of the Volga Hydroelectric Power Station (see B.V. Yakubovskiy's articles in Beton i Zhelezobeton, 1956, Nr 6 and 1957, Nr 12). The advantage of this construction is that no timber shuttering is required. The Gidroproyekt in the construction of Stalingrad Hydroelectric Power Station designed and used with advantage pre-cast-monolithic floors together with load-carrying reinforced concrete units. Cross-sections of these load-carrying beams are shown in Figs.1, 2 and 3. The beams are positioned 4 - 6 cm apart to allow for subsequent concreting of joints.

Card 1/3

SOV/97-59-1-11/18

Precast Reinforced Concrete Used for Floors in the Under-Water Parts of Hydroelectric Power Stations

Precast floor slabs, used for aqueducts and suction pipes, are cast in metal formwork and cured in curing chambers. The units of the spiral chamber are cast on the concreting yard. Concrete Mark 250, and reinforcement of steel Marks St.5 and St.3 were used. The precast reinforced concrete beams are of inverted "T" cross-section. Their height differs according to span as follows: 11-12 m span, 50-60 cm high: 9-10 m, 45-50 cm: 8-7 m, 35-45 cm: 7-6 m, 30-40 cm. Fig.2 shows the floor construction of the spiral chamber and Fig.3 the construction of the floor of aqueducts of the Stalingrad Hydroelectric Power Station. Experience has shown that in the case of spans bigger than 7 m the floor units should be doubly reinforced. Fig.4 illustrates assembly of the floor of the spiral chamber of the Stalingrad Hydroelectric Power Station. The load-carrying units were calculated for a superimposed load of 1.1-1.2 m thick concrete topping. The cracks of the load-carrying elements are between 0.1 and 0.2 mm wide. The magnitude of deflection, in the case of construction spanning

Card 2/3

SOV/97-59-1-11/18

Precast Reinforced Concrete Used for Floors in the Under-Water Parts of
Hydroelectric Power Stations

10.7 m with 1-1.2 m thick concrete topping, was 2.5 cm.
There are 4 figures.

Card 3/3

PEREVOZNIKOV, P., udarnik kommunisticheskogo truda; GODUNOV, I., matros,
chlen narodnoy druzhiny; YANDAL'TSEV, A., starshiy mashinist

For public judgement. Sov. profsoiuzy 16 no.19:40-41 O '60.
(MIRA 13:10)

1. Predsedatel' sudovogo komiteta traulera "Monchegorsk" (for
Perevoznikov). 2. Trauler "Stavropol'" (for Godunov, Yandal'tsev).
(Archangel--Trawls and trawling)
(Archangel--Social problems)

GODUNOV, I. B.

Acad Sci Kazakh SSR. Inst of Soil Sciences. Alma-Ata, 1956.

GODUNOV, I. B.- "The soil cover of the northeastern slopes of the Kalba mountains."
Acad Sci Kazakh SSR. Inst of Soil Sciences. Alma-Ata, 1956.
(Dissertation for the Degree of Candidate in Agricultural Sciences.)

SO: Knizhnaya Letopis' No. 13, 1956.

GODUNOV, I.B.

Soils of mountain steppes [with summary in English]. Pochvovedenie
no.5:34-40 My '57. (MLRA 10:9)

1. Institut pochvovedeniya Akademii nauk KazSSR, Alma-Ata.
(Kalba Range--Soils)

GODUNOV, I.B.

Problem of increasing the productivity of meadow sulfate-soda
Solonetz soils. Pochvovedenie no.3:82-83 Mr '65.

(MIRA 18:6)

1. Nauchno-issledovatel'skiy institut sel'skogo khozyaystva
TSentral'no-chernozemnoy polosy imeni Dokuchayeva.

GODUMOV N.T.

USSR/Soil Science - Cultivation, Amelioration, Erosion.

J-4

Abs Jour : Ref Zhur - Biol., No 2, 1958, 5817.

Author : Godumov, N.T., Kuz'min, M.S.

Inst : Stalingrad Agricultural Institute

Title : Experience in the Reclamation of Solonchak Soils Planted
With Tree Groves.

Orig Pub : Tr. Stalingradsk. s.-kh. in-ta, 1956, 6, 174-183

Abstract : The reason why the parks planted around the Stalingrad
Electric Station dried up was because the soil became sali-
ne; this is seen as a result of the rise of the minerali-
zed ground waters. The chloride-sulfate salination of the
upper soil horizons reaches 0.210-1.68%, and at a depth
of one meter it is 0.460-1.68%. Recommended is the use of
drainage, flushing, and regular sprinkling. Trukestan,
Canadian, (*Populus molinifera*) and black poplars should be

Card 1/2

BASKAKOV, P., (g. Gor'kiy); ABRAMYAN, S.; MUHACHEV, I., predsedatel' soveta radiokluba; KOCHENGAMOV, N., nachal'nik radiokluba; LATKIN, V., predsedatel' soveta radiokluba; SHISHUKOV, P., rukovoditel' konstruktorskoy sektsii kluba; BARBIN, G., chlen radiokluba; BUDANTSOV, V., predsedatel' soveta radiokluba; GODUNOV, P., nachal'nik radiokluba; TEVLEV.

Provide parts for radio amateurs. Radio no. 12:14-17 D '53. (MLRA 6:12)

1. Nachal'nik radiokluba Vsesoyuznogo dobrovol'nogo obshchestva sodeystviya armii, aviatii i flotu (for Baskakov). 2. Nachal'nik Vil'nyus-skogo radiokluba Vsesoyuznogo dobrovol'nogo obshchestva sodeystviya armii, aviatii i flotu (for Tevlev).

(Radio--Apparatus and supplies)

31017. COMMUNIST, . F.

Pervyy russkiy travmatolog Efrem Osipovich Mukhin (1766-1850). Vestnik
khirurgii im. Grekova, 1949, No. 4, s. 63-67, s portr.--Bibliogr: 15 nash.

GODUNOV, S.F.

Anatomic and biomechanic principles in construction of prostheses
for the lower extremities. Vest. Khir. 71 no.3:75 1951. (CLML 20:11)

GODUNOV, S.P.

Increase of functional efficiency of amputation stump. Khirurgia,
Moskva no. 1:57-61 Jan 1953. (CLML 24:2)

1. Doctor Medical Sciences. 2. Of Leningrad Scientific-Research
Institute for Prostheses (Director -- Prof. V. A. Kopylov).

GODUNOV, S.F.

Surgical therapy in a pain syndrome following leg amputation. Vop. neirokhir.
17 no. 4:59-60 Jl-Ag '53. (MLB 6:8)

1. Leningradskiy nauchno-issledovatel'skiy institut protezirovaniya.
(Amputation of leg)

NOVOSELOVA, A.I.; GODUNOV, S.P., doktor meditsinskikh nauk, zaveduyushchiy;
KOPYLOV, F.X., professor, direktor.

Lymphangioma of the right leg. Vest.khir. 73 no.5:65-66 S-0 '53.
(MLRA 6:11)

1. Klinika protezirovaniya Leningradskogo nauchno-issledovatel'skogo instituta
protezirovaniya. (Lymphatic--Tumors) (Leg--Tumors)

GODUNOV, S.F., doktor meditsinskikh nauk

Making prostheses in St.Petersburg and in Leningrad. Vest.khir.
74 no.7:80-85 O-N '54. (MLRA 8:10)

1. Iz Leningradskogo nauchno-issledovatel'skogo instituta prote-
zirovaniya (dir.-prof. P.A.Kopylov)
(ARTIFICIAL LIMBS,
hist. of prod. & application in Russia)

GODUNOV, S.P., doktor med. nauk; NOVOSLOVA, A.I.

Levels and methods of amputation in necrosis of the extremities
in endarteritis obliterans. Vest. khir. 76 no.11:38-45 '55
(MLRA 9:4)

1. Iz kliniki protezirovaniya (zav.--doktor meditsinskikh nauk S.P.
Godunov) Leningradskogo nauchno-issledovatel'skogo instituta
protezirovaniya.

(ENDARTERITIS OBLITERANS, compl. surg..
necrosis of extremities, levels & methods of amputation)

(EXTREMITIES, gangrene,
caused by endarteritis obliterans, surg., levels &
methods of amputation)

(GANGRENE,
extremities, caused by endarteritis obliterans, surg.,
levels & methods of amputation)

GODUNOV, S.F. (Leningrad, Nevskiy pr. d.20, kv.?)

A new method for amputation of the foot. Vest.khir. 79 no.12:116-118
D '57. (MIRA 11:1)

1. Iz Leningradskogo nauchno-issledovatel'skogo instituta protezirovaniya (dir. - prof. F.A.Kopylov)
(AMPUTATION,
foot, new method)

GODUNOV, S.F. (Leningrad)

"Some questions in the problem of pain in traumatology and orthopedics" by D.A. Novozhilov. Reviewed by S.P. Godunov.
Khirurgia 35 no.12:112-114 D '59. (MIRA 13:6)
(PAIN) (WOUNDS AND INJURIES) (NOVOZHILOV, D.A.)

BLOKHIN, V.N., dots.; BOGDANOV, F.R., prof.; VAYNSHTET, V.G., prof.;
GODUL'EV, S.F., doktor med. nauk; MITREYKT, I.M., kand. med.
nauk; MOVSHOVICH, I.A., kand. med. nauk; MOLODAYA, Ye.K.,
prof.; NIKIFOROVA, Ye.K., prof.; NOVACHENKO, N.P., prof.;
ROZOV, V.I., prof.; CHAKLIN, V.D., prof.; YAZYKOV, D.K.,
prof.; PETROVSKIY, B.V., prof., otv. red.; SENCHILO, K.K.,
tekhn. red.

[Multivolume manual on surgery] Mnogotomnoe rukovodstvo po
khirurgii. Moskva, Medgiz, Vol.11, book 1. [Surgery of the
upper extremities] Khirurgiia verkhnei konechnosti. 1960.
518 p. (MIRA 15:3)

1. Chlen-korrespondent Akademii meditsinskikh nauk SSSR (for
Bogdanov, Novachenko, Chaklin). 2. Deystvitel'nyy chlen Aka-
demii meditsinskikh nauk SSSR (for Petrovskiy).
(EXTREMITIES, UPPER—SURGERY)

GODUNOV, S.F.

Some problems in the current status of prosthesis and
prosthetic construction data from foreign literature.
Ortop. travm. i protez. 21 no. 9:67-73 S '60. (MIRA 13:12)

1. Iz Leningradskogo nauchno-issledovatel'skogo instituta
protezirovaniya (dir. - dotsent M.V. Strukov).
(PROSTHESIS)

GODUNOV, D.F.

Principles of amputation and reamputation. Vest. Khir. 85 no. 8:134-
140 Ag '60. (MIRA 14:1)

(AMPUTATION)

GODUNOV, S. F., doktor med. nauk

Pattern of the bone tissue distribution in the human extremities.
Ortop., travm. i protez. no.11:51-57 '61. (MIRA 14:12)

1. Iz Leningradskogo nauchno-issledovatel'skogo instituta protezirovaniya (dir. - dotsent M. V. Strukov)

(EXTREMITIES(ANATOMY))

ABRAKOV, L.V., kand. med. nauk; BLINOV, N.I., prof.; GADZHIYEV, S.A., prof.; GODUNOV, S.F., prof.; ZVORYKIN, I.A., prof.; ZIBOL'D, A.N., prof.; KOROTKEVICH, N.S., dots.; MARLEY, Ye.F.; MASLOV, S.I., kand. med. nauk; NADEIN, A.P., prof.; POSTNIKOV, B.N., prof.; ROZOV, V.I., prof.[deceased]; UGRYUMOV, V.M., prof.; KHROMOV, B.M., prof.; UDERMAN, Nikolay Il'ich, red.; KHARASH, G.A., tekhn. red.

[Manual on surgical interventions for surgeons of rural sectional and district hospitals] Rukovodstvo po operativnym vmeshatel'stvam dlia khirurgov sel'skikh uchastkovykh i raionnykh bol'nits. Izd.2., ispr. i dop. Leningrad, Medgiz, 1963. 390 p.
(MIRA 16:7)

(SURGERY--HANDBOOKS, MANUALS, ETC.)

GODUNOV, S.F., prof.; SHULYAK, I.P., kand. med. nauk

Orthopedic footwear and inlay soles; data of foreign literature. Ortop.,
travm. i protez. 25 no.2:74-83 F '64. (MIRA 1881)

1. Adres avtorov: Leningrad, prospekt Karla Marks'a, d.9. Institut
protezirovaniya.

GODUNOV, S.F., prof.; PROKOF'YEVA-MIKHAYLOVSKAYA, L.E., dotgen. [deceased];
OSHEROVICH, V.Z., inzh.

Some problems of the biomechanics and treatment of foot deformities.
Ortop., travm. i protez. 25 no.6:36-42 Je '64.

(MIRA 18:3)

1. Iz Leningradskogo instituta protezirovaniya (dir. - dotsent M.V.
Strukov). Adres avtorov: Leningrad, prospekt Karla Marksa, d.9/12,
Leningradskiy nauchno-issledovatel'skiy institut protezirovaniya.

ABRAMOV, Sh.I., prof.; BAIROV, G.A., prof.; BLINOV, N.I., prof.;
GADZHIYEV, S.A., prof.; GODUNOV, S.F., prof.; GOMZYAKOV,
G.A., prof.; DEMIN, V.N., prof.; ZVORYKIN, I.A., prof.;
KAPITSA, L.M., kand. med. nauk; MOKROVSKAYA, S.P., kand.
med. nauk; POSTNIKOV, B.N., prof.; PORKSHEYAN, O.Kh.,
prof.; SIDORENKO, L.N., kand. med. nauk; TAL'MAN, I.M.,
prof.; FEDOROVA, A.D., kand. med. nauk; FILATOV, A.N.,
prof.; KHRONOV, B.M., prof.; SARKISOV, M.A., red.

[Errors, hazards and complications in surgery; Oshibki,
opasnosti i oslozhneniya v khirurgii. Leningrad, Mo-
ditsina, 1965. 563 p.]
(MIRA 18:7)

Godunov, S.K.

238

Godunov, S. K. . On a problem of Minkowski. Doklady Akad. Nauk SSSR (N.S.) 59, 1523-1528 (1948). (Russian)

Let u, v be two homogeneous linear forms with unit determinant in x, y , let λ be the minimum of $|uv|$ for integral nonzero x, y . The author proves that for any real numbers α, β there exist integral x, y such that

$$|(u+\alpha)(v+\beta)| \leq \{(1+4\lambda^2)\},$$

and exhibits various forms for which the constant either is, or is not, best possible. The proof is elementary, and modelled on the proof by Khintchine [Bull. Acad. Sci. URSS. Sér. Math. [Izvestia Akad. Nauk SSSR] 10, 294 (1946); these Rev. 8, 444] of the corresponding theorem for the minimum of $|x(ux - y + \alpha)|$. Standard methods of the geometry of numbers are used; after a preliminary transformation to bring one generating vector of the (u, v) lattice to an angle of 45° with the axes, the proof utilises only the shape of the region $|uv| \leq C$ in the neighborhood of the origin.

F. J. Dyson (Princeton, N. J.)

Source: Mathematical Reviews,

Vol. 9 No. 10

GODUNOV, S.

"Numerical methods in engineering [in English] by M.G.Salvadori.
Reviewed by S.Godunov. Usp.mat.nauk 11 no.5:257-258 S-0 '56.
(Numerical calculations) (Salvadori, M.G.) (MLRA 10:2)

GODUNOV, S.K.

SUBJECT USSR/MATHEMATICS/Differential equations CARD 1/2 PG - 624
 AUTHOR GODUNOV S.K.
 TITLE On the uniqueness of the solutions of hydrodynamic equations.
 PERIODICAL Mat.Sbornik, n. Ser. 40, 467-478 (1956)
 reviewed 2/1957

The author investigates the uniqueness of the solution of the system

$$(1) \quad \left\{ \begin{array}{l} \frac{\partial u}{\partial t} + \frac{\partial p(v, E)}{\partial x} = 0 \\ \frac{\partial v}{\partial t} - \frac{\partial u}{\partial x} = 0 \\ \frac{\partial(E + \frac{u^2}{2})}{\partial t} + \frac{\partial pu}{\partial x} = 0. \end{array} \right.$$

Since this system even for smooth initial values not ever admits continuous solutions in a sufficiently great region, the author considers discontinuous solutions which instead of (1) satisfy the integral relations

$$(2) \quad \left\{ \begin{array}{l} \oint u \, dx - p(v, E) \, dt = 0 \\ \oint v \, dx + u \, dt = 0 \\ \oint (E + \frac{u^2}{2}) \, dx - p u \, dt = 0 \end{array} \right.$$

INSTITUTION:

APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R000615520011-0

SUBJECT USSR/MATHEMATICS/Applied mathematics CARD 1/3 PG = 754
 AUTHOR GODUNOV S.K.
 TITLE The difference method for the calculation of shock waves.
 PERIODICAL Uspechi mat. Nauk 12, 1, 176-177 (1957)
 reviewed 5/1957

For the calculation of the discontinuous solutions of

$$\frac{\partial u}{\partial t} + \frac{\partial p(v, E)}{\partial x} = 0$$

$$\frac{\partial v}{\partial t} - \frac{\partial u}{\partial x} = 0$$

$$\frac{\partial(E + \frac{u^2}{2})}{\partial t} + \frac{\partial pu}{\partial x} = 0$$

the following scheme is proposed. Let the gas be decomposed into layers with the masses $h = \Delta x$. In the initial moment let u, v, E be constant in every layer. Since at the boundary of two layers u and $p = p(v, E)$ are different on both sides of the boundary, there occurs a decomposition of the initial jump. Therefore at the boundary there appear a velocity U and a pressure P which remain constant so far as on these boundaries there arrive waves which arose

Uspechi mat. Nauk 12, 1, 176-177 (1957)

CARD 2/3

PG - 754

by the decomposition of the jumps at the neighboring boundaries. Let the index m denote the belonging to the m -th boundary. The index $m + \frac{1}{2}$ denotes the belonging to the layer between the m -th and the $(m+1)$ -th boundary. Let τ be the time during which still all U and P are constant. Then there hold the formulas

$$u_{m+\frac{1}{2}}(t+\tau) = u_{m+\frac{1}{2}}(t) - \frac{\tau}{h} (P_{m+1} - P_m)$$

$$v_{m+\frac{1}{2}}(t+\tau) = v_{m+\frac{1}{2}}(t) + \frac{\tau}{h} (U_{m+1} - U_m)$$

$$(E + \frac{u^2}{2})_{m+\frac{1}{2}}(t+\tau) = (E + \frac{u^2}{2})_{m+\frac{1}{2}}(t) - \frac{\tau}{h} (P_{m+1} U_{m+1} - P_m U_m).$$

The magnitudes $u_{m+\frac{1}{2}}(t+\tau)$, $v_{m+\frac{1}{2}}(t+\tau)$, $E_{m+\frac{1}{2}}(t+\tau)$ may serve as initial

values for the next step etc.

For the computation of P and U a simple method of iteration or approximative

• Успехи мат.Наук 12, 1, 176-177 (1957)

CARD 3/3

PG ~ 754

formulas can be used.

The boundedness of \mathcal{C} (P and U constant) guarantees the stability of the scheme.

An investigation of the linearized system of equations shows that this scheme is the best one in a certain sense. Besides for this scheme - in contrary to the scheme of Lax (Comm. pure and appl. Math. 7, No.1, 159-193 (1954)) - for smooth velocities and pressure the entropy does not change. According to this scheme, with Soviet computing machines numerous computations were made. The comparison with the results obtained with the aid of the method of characteristics always was satisfactory.

Godunov, S.A.

20-3-1/59

AUTHORS: Bagrinovskiy, K.A., Godunov, S.K.

TITLE: Difference Schemes for Multidimensional Problems. (Raznostnyye skhe-my dlya mnogomernykh zadach)

PERIODICAL: Doklady Akad.Nauk SSSR, 1957, Vol. 115, Nr 3, pp. 431-433 (USSR)

ABSTRACT: The present paper reports on a new type of construction and investigation of the stability of the difference schemes for the solution of the Cauchy problem for multidimensional systems of hyperbolic equations of the type $\frac{\partial u_i}{\partial t} - \sum_{j=1, k=1}^{j=m, k=n} a_{ij}^k \frac{\partial^k u_j}{\partial x_k} + \sum_{j=1}^m b_{ij} u_j$.

(T). The coefficients a_{ij}^k, b_{ij} can be considered as constants, although the principles proposed here can also be applied to equations with variable coefficients. Beside this system the authors examine the n auxiliary systems $\frac{\partial u_j^{(k)}}{\partial t} - \sum_{j=1}^m a_{ik}^k \frac{\partial^k u_j^{(k)}}{\partial x_k} + \sum_{j=1}^m b_{ik}^k u_j^{(k)}$,

$k = 1, 2, \dots, n (T_k)$. In this connection the b_{ij}^k are arbitrary and satisfy the condition $b_{ij}^k = b_{ij}$. In all these functions the unknown functions $u_j^{(k)}$ are dependent on the time and on only one spatial variable x_k . The present work shall show the following: When the difference schemes for the "one-dimensional" systems (T_k) can be constructed, a certain scheme can also be constructed for the "n-dimensional" system T. The authors investigate the hyperbolic system

Card 1/2

Difference Schemes for Multidimensional Problems.

20-3-1/59

of the differential equations $\frac{\partial u_i}{\partial t} = \sum_j a_{ij} \frac{\partial u_j}{\partial x} + \sum_j b_{ij} u_j$. The authors use an orthogonal network in the x,t-plane with the step width τ or h respectively with regard to the time t or the spatial variable x respectively. A vector whose components are the positive numbers g_i is here designated by the authors with g . When for every one of the systems (T_k) a g -stable scheme can be constructed (the vector g is here common for all k), a stable scheme can also be constructed for the scheme (T) . These considerations are (as example) applied to the construction of a difference scheme for the simplest system of the hyperbolic equations:

$\frac{\partial u}{\partial t} + \frac{\partial p}{\partial x} = 0, \frac{\partial v}{\partial t} + \frac{\partial p}{\partial y} = 0, \frac{\partial p}{\partial t} + \frac{\partial u}{\partial x} + \frac{\partial v}{\partial y} = 0$. Moreover the representation of difference schemes for complicated equations by the "products" can also be useful in some other cases for the individual groups of terms occurring in this system. As an example for this a scheme is given here which examines the propagation of sound in a heat-conducting medium. There is 1 Slavic reference.

ASSOCIATION: Mathematical Institute AN USSR imeni V.A.Steklov (Matematicheskiy institut imeni V.A.Steklova Akademii nauk SSSR)

PRESENTED, March 4, 1957, by Keldysh, V.A., Academician.

SUBMITTED, February 2, 1957

AVAILABLE: Library of Congress

Card 2/2

16(1)

AUTHOR: Godunov, S.K. (Moscow)

SOV/39-47-3-2/4

TITLE: Difference Methods for the Numerical Calculation of the Discontinuous Solutions of Hydrodynamic Equations (Raznostnyy metod chislennogo rascheta razryvnykh resheniy uravneniy gidrodinamiki)

PERIODICAL: Matematicheskiy sbornik, 1959, Vol 47, Nr 3, pp 271-306 (USSR)

ABSTRACT: The paper consists of two chapters. In the first one the author considers difference schemes for linear equations. He states that the scheme

$$u^k = \sum c_{n-k} u_n$$

transforms all monotonic functions into monotonic with the same direction of growth, if and only if all c_m are nonnegative. As an application of this criterion the most exact scheme of the first order of exactness for the equation $\frac{\partial u}{\partial t} + \frac{\partial u}{\partial x}$ is given. Furthermore it is shown that for this equation there is no scheme of second order of exactness satisfying the monotony condition (see above). As the most suitable scheme for the

Card 1/3